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GB 1512277 A **GB 0788099 A** **US 4171753 A**

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(54) Sweet dispenser

(57) A dispenser 10 for sweets 9 comprises a body 11 providing a compartment 15 for a stack of the sweets. The compartment 15 has an end (18 fig 1) at which a side opening 22 is formed. A spring 23 pushes the sweets 9 towards the end (18) of the compartment 15. A pivotable dispensing blade 30 may be swung from a rest position (fig 4) to a sprung position (fig 2) in order to allow a sweet to be pushed toward the side opening 22 by the spring 23, and then the blade is allowed to return to its rest position under the influence of its spring (35 fig 1) so as to eject said one sweet out through the side opening 22.

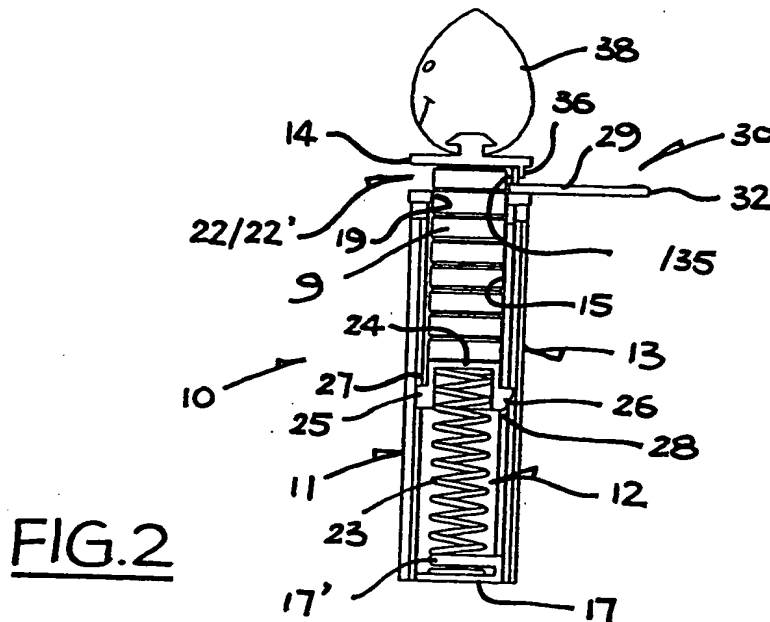


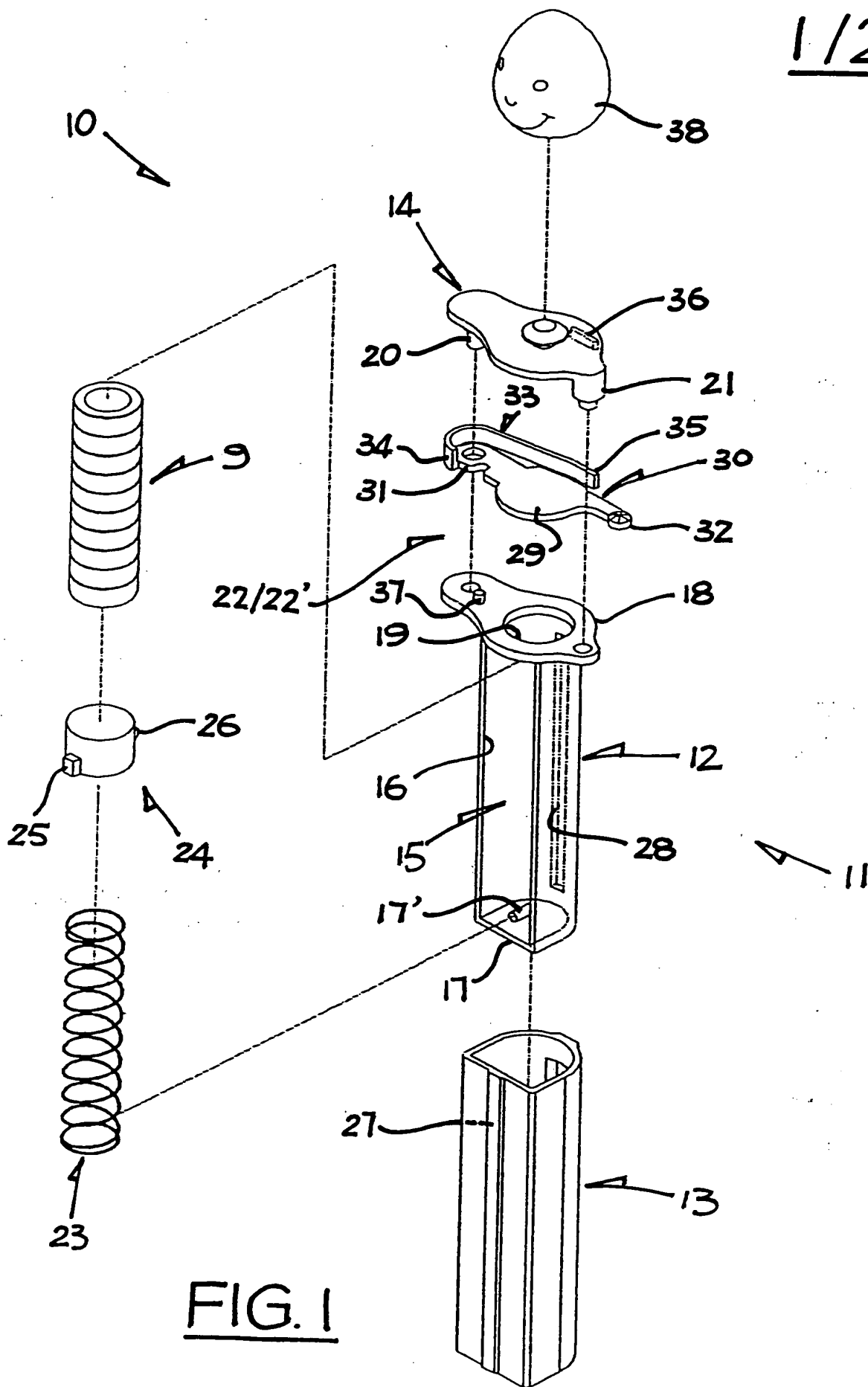
FIG. 2

At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

This print takes account of replacement documents submitted after the date of filing to enable the application to comply with the formal requirements of the Patents Rules 1995

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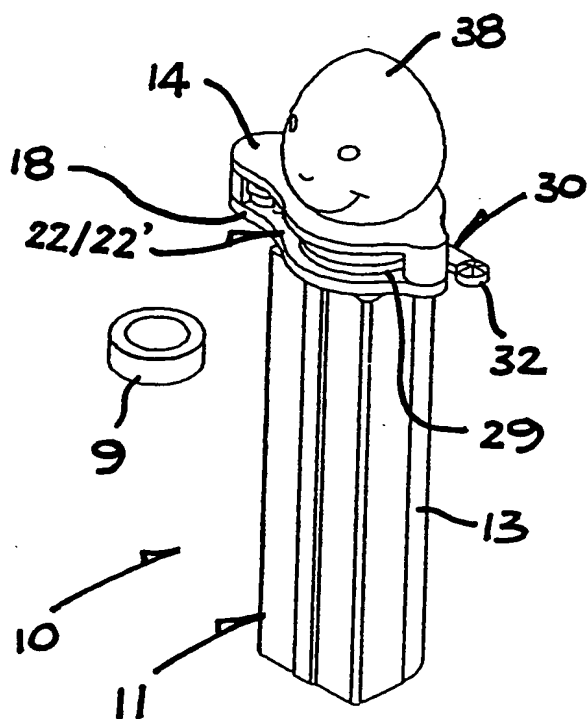


FIG. 4

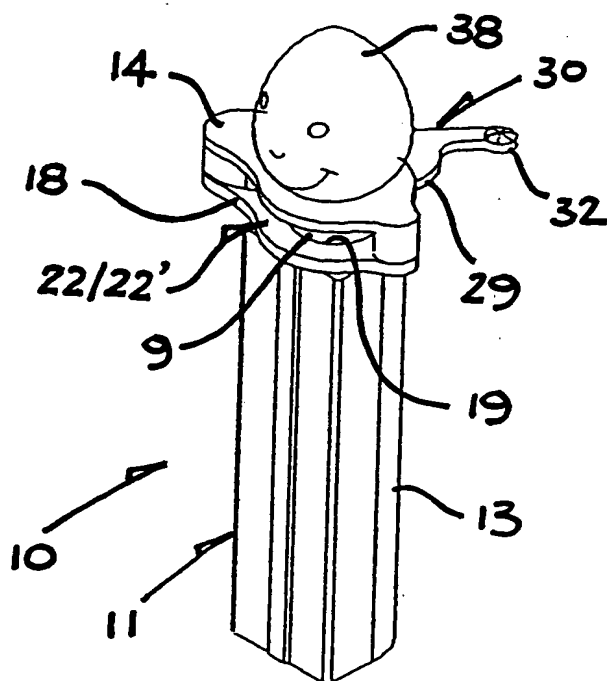
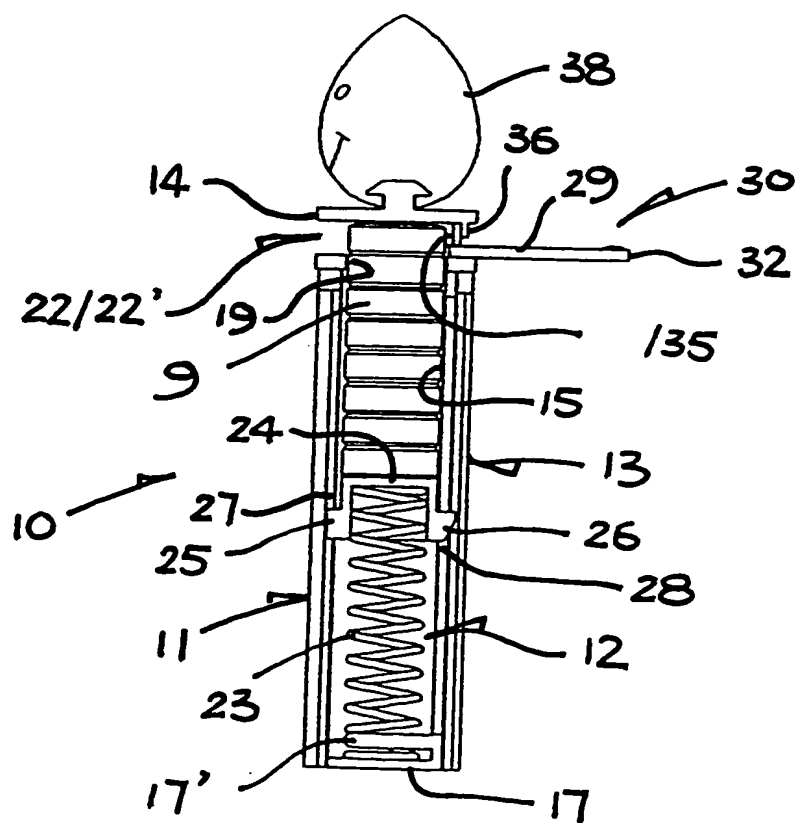


FIG. 3

FIG. 2



DISPENSER FOR CANDIES OR THE LIKE

The present invention relates to a dispenser for candies or the like.

It is known to have dispensers for candies, which allow the
5 candies to be dispensed one by one onto the user's hand or in a certain manner ready for collection. Such existing dispensers are found to be often unreliable or inconvenient to use.

The invention seeks to mitigate or to at least alleviate
10 such a problem in the prior art.

According to the invention, there is provided a dispenser for candies or the like, which dispenser comprises a body providing a compartment for accommodating a series of candies, said compartment having an end at which a side
15 opening is formed, a spring arranged to resiliently urge a said series of candies towards the end of the compartment to position one of a said series of candies adjacent the side opening, and a dispensing member supported for movement from a sprung position to a rest position towards
20 the side opening so as to eject said one candy out through the side opening.

Preferably, the dispensing member is arranged in the rest position to hold a said series of candies against the

action of the spring and in the sprung position to permit an adjacent candy of a said series to align with the side opening.

In a preferred embodiment, the dispensing member is supported for swinging between the rest and sprung positions.

It is preferred that the dispensing member has a part extending out of one side of the body for direct engagement by a user so as to be moved to the sprung position.

10 In a specific construction, the dispensing member is in the form of a blade.

Preferably, the dispensing member is resiliently biased towards the rest position by a spring which forms part of the dispensing member.

15 In a preferred embodiment, the body has an inner shell providing the compartment and an outer sleeve which is slidable on the shell to open or close the compartment.

More preferably, the first-mentioned spring is provided within the compartment and arranged to be compressed by the sleeve when the sleeve is slid to open the compartment.

20 The invention will now be more particularly described, by

way of example only, with reference to the accompanying drawings, in which:

Figure 1 is an exploded front perspective view of an embodiment of a dispenser in accordance with the invention;

5 Figure 2 is a cross-sectional side view of the dispenser of Figure 1;

Figure 3 is a front perspective view of the dispenser of Figure 1, in a first operating condition; and

10 Figure 4 is a front perspective view corresponding to Figure 3, showing the dispenser in a second operating condition.

Referring firstly to Figures 1 and 2 of the drawings, there is shown a dispenser 10 embodying the invention, which dispenser 10 has an upright body 11 formed by an inner
15 shell 12, an outer sleeve 13 and a top plate 14. The shell 12 has a horizontal U-shaped cross-section and defines a vertical compartment 15, having a flat open front side 16, for accommodating a column (series) of disc-like candies 9 or the like. The shell 12 includes a regular lower end
20 wall 17 and an enlarged upper end wall 18. The upper end wall 18 has an oblong outline shape and a central circular hole 19 of a diameter slightly larger than that of the candies 9.

The sleeve 13 is constructed to slide, from below, over onto the shell 12 so as to encase the part of the shell 12 below the upper end wall 18. The top plate 14 has generally the same oblong outline shape as the upper end wall 18, and has, depending vertically from its opposite ends, two integral posts 20 and 21. By means of the posts 20 and 21, the top plate 14 is fixed on the upper end wall 18, in an aligned and parallel manner, to form a horizontal gap 22 which is slightly thicker than each of the candies 9. The gap 22 has a front side opening 22'.

A compression coil spring 23 is provided inside the lower half of the compartment 15, which has an upper end covered by a circular end cap 24 and a lower end engaged by a small post 17' of the shell 12 extending at a small distance over the lower end wall 17. The end cap 24 has a pair of small front and rear side projections 26 and 27 which engage slidably with a vertical groove 27 formed on the inner side of a front wall of the sleeve 13 and a vertical slot 28 formed on the rear wall of the shell 12, respectively, in order to maintain the orientation of the end cap 24. The body of the end cap 24 has a diameter slightly smaller than that of the hole 19 of the upper end wall 18 such that, when the spring 23 is fully extended, the end cap 24 will be urged by the spring 23 up into the hole 19 to lie flush with the top side of the upper end wall 18. The end cap 24 stops in this position by its front and rear projections 25 and 26 reaching the uppermost ends of the respective groove

27 and slot 28.

The compartment 15 will be revealed or opened when the sleeve 13 is slid downwards relative to the shell 12. Upon opening, the sleeve 13 drags the end cap 24 to move down simultaneously, by reason of the engagement between the uppermost end of the groove 27 of the former and the front projection 25 of the latter, whereby the spring 23 is compressed. The space between the end cap 24 and the upper end wall 18 of the shell 12 is to be loaded with the column of candies 9, when the compartment 15 is opened. Inside the closed compartment 15, the column of candies 9 is urged upwards by the spring 23 via the end cap 24 to have a tendency to move upwards through the hole 19 of the shell upper end wall 18.

The dispenser 10 further includes a dispensing or operating member in the form of a horizontal blade 30 provided within the gap 22. The blade 30 is hinged at one end 31 about the post 20 of the top plate 14 for horizontal swinging. The opposite, free end of the blade 30 is in the form of a lever 32 extending laterally out of the gap 22. A J-shaped leaf spring 33 is provided on the blade 30. The spring 33 extends initially, at a first end 34, round the outer side of the hinged end 31 of the blade 30 and then, at a second end 35, along and immediately above the rear edge of a middle portion 29 of the blade 30. The spring 33 is only connected at its first end 34 to the blade 30, with the

second end 35 being free and closing the rear side of the gap 22. The top plate 14 has, on its rear side, a depending stop 36 for abutment by the free end 35 of the spring 33.

5 The operating blade 30 is resiliently biased by the spring 33 to swing forwards until its lever 32 bears against the other post 21 of the top plate 14. In this rest position, the blade 30 has its middle portion 29 covering the central hole 19 of the upper end wall 18 of the shell 12 to stop
10 the topmost candy 9 of the column passing upwards through the hole 19 under the action of the spring 23. A fixed stud 37 is provided on the top side of the upper end wall 18 of the shell 12, for engagement by the first end 34 of the spring 33 in order to limit the extent to which the
15 blade 30 can be swung backwards.

A decorative figure head 37 is fixed on the top plate 14.

Reference is now made to Figures 3 and 4 of the drawings. In use, the dispenser 10 is to be held by one hand of a user grasping the body 11. The blade 30 is manually swung
20 backwards (Figure 3) by the user's thumb pushing the lever 32 on one side backwards, against the action of the spring 33. Upon removal of the blade's middle portion 29 from the hole 19 of the upper end wall 18 of the shell 12, the topmost candy 9 of the column is permitted to pass upwards
25 through the hole 19 to abut with the bottom side of the top

plate 14, hence entering into the gap 22 and aligning with the front side opening 22', under the action of the spring 23. The blade 30 is then released to be swung forwards (Figure 4) by the spring 33, which on its way will strike
5 the topmost candy 9 of the column horizontally out of the gap 22 through the front side opening 22'. As soon as the first candy 9 is dispensed, the next candy 9 is immediately moved up by the spring 23 to become ready for dispensing.

The dispensed candy 9 may be, for example, ejected onto the
10 user's hand or directly into his mouth. One hand operation is thus rendered possible.

In a different embodiment, the operating blade 30 may be arranged to be swung or slid backwards, against the action of a suitable spring for quick return later, by a slide
15 button provided on the body 11 of the dispenser 10.

It is to be appreciated that the dispenser of this invention may be used to hold and dispense, for example, cough drops or pills, other than confectionary.

The invention has been given by way of example only, and
20 various other modifications of and/or alterations to the described embodiment may be made by persons skilled in the art without departing from the scope of the invention as specified in the appended claims.

CLAIMS

1. A dispenser for candies or the like, comprising a body providing a compartment for accommodating a series of candies, said compartment having an end at which a side opening is formed, a spring arranged to resiliently urge a said series of candies towards the end of the compartment to position one of a said series of candies adjacent the side opening, and a dispensing member supported for movement from a sprung position to a rest position towards the side opening so as to eject said one candy out through the side opening.
2. A dispenser as claimed in claim 1, wherein the dispensing member is arranged in the rest position to hold a said series of candies against the action of the spring and in the sprung position to permit an adjacent candy of a said series to align with the side opening.
3. A dispenser as claimed in claim 1 or claim 2, wherein the dispensing member is supported for swinging between the rest and sprung positions.
4. A dispenser as claimed in any one of claims 1 to 3, wherein the dispensing member has a part extending out of one side of the body for direct engagement by a user so as to be moved to the sprung position.

5. A dispenser as claimed in any one of the preceding claims, wherein the dispensing member is in the form of a blade.

6. A dispenser as claimed in any one of the preceding
5 claims, wherein the dispensing member is resiliently
biased towards the rest position by a spring which forms
part of the dispensing member.

7. A dispenser as claimed in any one of the preceding
claims, wherein the body has an inner shell providing the
10 compartment and an outer sleeve which is slidable on the
shell to open or close the compartment.

8. A dispenser as claimed in claim 7, wherein the first-
mentioned spring is provided within the compartment and
arranged to be compressed by the sleeve when the sleeve is
15 slid to open the compartment.

9. A dispenser for candies or the like, substantially as
hereinbefore described with reference to Figures 1 to 4 of
the accompanying drawings.

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Patents Act 1977
Examiner's report to the Comptroller under Section 17
(The Search report)

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Search Examiner
R D CAVILL

Date of completion of Search
28 FEBRUARY 1996

Databases (see below)

(i) UK Patent Office collections of GB, EP, WO and US patent specifications.

Documents considered relevant following a search in respect of Claims :-
1 TO 9

(ii)

Categories of documents

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| <p>X: Document indicating lack of novelty or of inventive step.</p> <p>Y: Document indicating lack of inventive step if combined with one or more other documents of the same category.</p> <p>A: Document indicating technological background and/or state of the art.</p> | <p>P: Document published on or after the declared priority date but before the filing date of the present application.</p> <p>E: Patent document published on or after, but with priority date earlier than, the filing date of the present application.</p> <p>&: Member of the same patent family; corresponding document.</p> |
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Category	Identity of document and relevant passages		Relevant to claim(s)
X	GB 1512277	(STAR) see whole document	1 to 5
X	GB 788099	(FORTIPHONE) see Figure 4	1, 3, 4, 5
X	US 4171753	(VREEDE) see Figures 7-10	1, 4, 5, 6

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